

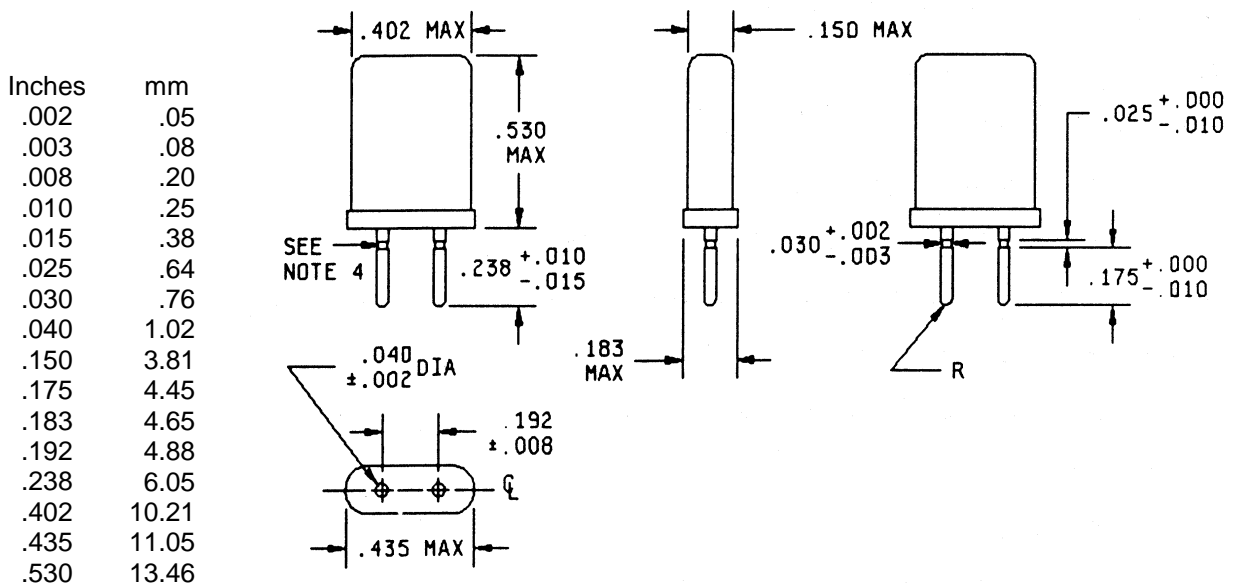
PERFORMANCE SPECIFICATION SHEET

CRYSTAL UNIT, QUARTZ, CR78/U

This specification is approved for use by all Departments and Agencies of the Department of Defense.

The requirements for acquiring the product described herein shall consist of this specification and MIL-PRF-3098.

Pertinent characteristics: 2.2 MHz to 20 MHz; fundamental; noncontrolled; antiresonance.



NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Marking shall be in accordance with MIL-PRF-3098.
4. The pin undercut may be omitted.

FIGURE 1. Crystal unit - CR78/U.

MIL-PRF-3098/62E

REQUIREMENTS:

Dimensions, marking, and configuration: See figure 1.

Frequency range: 2.2 MHz to 20 MHz, inclusive.

Capacitance, shunt: 7 pF, maximum.

Frequency tolerances (operating temperature range): ± 50 ppm.

Equivalent resistance: See table I.

TABLE I. Equivalent resistance.

Frequency range MHz	Maximum resistance Ohms
2.20 to 3.00	360
3.00+ to 3.75	180
3.75+ to 4.75	120
4.75+ to 6.00	75
6.00+ to 7.00	50
7.00+ to 10.00	30
10.00+ to 20.00	25

Mode of oscillation: Fundamental.

Antiresonance, load capacitance: 30.0 pF ± 0.5 pF.

Operating temperature ranges (noncontrolled): -55°C to $+105^{\circ}\text{C}$, inclusive.

Rated drive level: 1.0 mW maximum.

Shock (specified pulse):

Frequency change permitted: ± 5 ppm.

Equivalent resistance change permitted: ± 10 percent.

Vibration: Method 204 of MIL-STD-202, test condition A.

Frequency change permitted: ± 5 ppm.

Equivalent resistance change permitted: ± 10 percent.

Thermal shock:

Frequency change permitted: ± 5 ppm.

Equivalent resistance change permitted: ± 10 percent.

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Aging:

Frequency change permitted: ± 5 ppm.

Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extent of the changes.

Custodians:

Army - CR

Navy - EC

Air force - 85

Review activities:

Army - AR, MI

Navy - AS, MC, SH

Air Force - 17, 19

Preparing activity:

Army - CR

Agent:

DLA - CC

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